

Watermelon Cultivar Trial - 2003

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The 2003 watermelon cultivar trial evaluated eight seeded (diploid) and eleven seedless (triploid) cultivars for Midwest production potential. The trial was grown on black plastic mulch with drip irrigation. Transplants were set in the field on May 14 and after some initially cool weather good growing conditions prevailed. Warm sunny days and moderate night temperatures during fruit development resulted in high quality fruit with crisp firm flesh that was exceptionally sweet. Harvest occurred from July 22 through August 19. Table 1 reports marketable yield only - fruit that had good shape, color and a firm full sound when thumped. Number of fruit per acre and CWT/Acre were calculated from a conversion factor based on 2,300 plants per acre. At least ten marketable fruit of each cultivar were cut open to evaluate internal quality and to obtain % soluble solids (sweetness) readings. *Jade Star*, *Yellow Doll* and *Celebration* were the first seeded cultivars to bear ripe fruit while *Imagination*, *Gypsy* and *Sweet Delight* were the earliest maturing seedless.

2003 Best Performers

Seedless: #7167, *Revolution*, *Freedom*, *Palomar*, *Seedless Sangria*, *Sun Ray*, *Gypsy*.

Seeded: *Stars n' Stripes*, #820, *Celebration*.

Materials and Methods

Planting: Planted in greenhouse, one seed per cell, 72 cell-pack, April 17, 2003.
Transplanted to the field May 14.

Plot Design: RCB, 3 reps. Plot = 1 row of 6 hills 28" apart, rows 7' apart.

Culture: Loamy sand soil type. Watermelons grown using plasticulture system. Fertilizer applied preplant incorporated under plastic mulch and through trickle tubes during growing season. Rates determined by soil and plant tests.

Pesticides: Curbit, Poast herbicide; Capture, Furadan 4F, Sevin XLR insecticide; Bravo 720, Quadris fungicide.

Table 1. Watermelon cultivar marketable yield and fruit characteristics.

Cultivar	Seed Source	Market Yield CWT/A	Market Fruit No./Acre	Avg Frt Wt - lbs	% Soluble Solids	Comments
<i>Seeded</i>						
Stars n' Stripes	ST	941.4	4405	21.3	11.6	<i>elongated striped fruit, bright red crisp flesh</i>
# 820	AC	925.3	3629	25.5	11.3	<i>'Allsweet' type, late maturity but extra large fruit</i>
Celebration	RG	865.3	4221	20.5	10.5	<i>early maturing 'Allsweet' type</i>
Yellow Doll	ST	862.3	11299	7.6	10.9	<i>small yellow-fleshed icebox, dark seeds</i>
Sangria	RG	856.7	4371	19.6	11.3	<i>oblong fruit, crisp sweet dark red flesh, lots of seeds</i>
Crimson Sweet	HL	756.0	4022	18.3	10.9	<i>standard open pollinated</i>
Jamboree	RG	752.3	3800	19.8	9.8	<i>'Allsweet' type hybrid</i>
Jade Star	RI	701.1	4788	14.6	10.7	<i>early maturity, round & dark skinned</i>
<i>Seedless</i>						
# 7167	AC	1032.0	7277	14.3	11.1	<i>high yield potential, firm flesh can be fibrous</i>
Revolution	SS	850.6	5362	15.8	11.4	<i>good quality oblong seedless Allsweet type</i>
Palomar	RG	843.0	5554	15.0	11.6	<i>nice but late maturity, medium/ dark green stripes</i>
Freedom	SS	827.7	4788	16.9	12.1	<i>excellent quality, elongated fruit with 'Jubilee' stripes</i>
Seedless Sangria	RG	820.4	5362	15.2	11.2	<i>smaller more oval shape than Sangria, good quality</i>
Sun Ray	SS	755.5	6128	12.2	12.4	<i>yellow flesh, round fruit, thin dark green stripes, nice</i>
Gypsy (#8914)	HM	752.0	5489	13.7	11.4	<i>round striped fruit, good quality</i>
Tri X 313	RG	745.7	5554	13.4	10.5	<i>some hollow heart, oval/oblong, striped</i>
Imagination	RG	715.3	5745	12.4	11.1	<i>early maturing, seedless 'Sugar Baby' type</i>
Amarillo	RG	668.7	7277	9.2	11.2	<i>round fruit, yellow flesh</i>
Sweet Delight	RG	606.5	4022	15.0	11.4	<i>oval/oblong, striped, some hollow heart</i>
<i>Trial Avg.</i>		<i>795.4</i>	<i>5304</i>	<i>16.0</i>	<i>11.2</i>	
<i>LSD 5%</i>		<i>245.8</i>	<i>1144</i>	<i>3.2</i>		